



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/830,033	04/23/2004	Michael R. Duck	PAT 957-2 US	7506
26123 7590 01/05/2007 BORDEN LADNER GERVAIS LLP WORLD EXCHANGE PLAZA 100 QUEEN STREET SUITE 1100 OTTAWA, ON K1P 1J9 CANADA			EXAMINER CARTAGENA, MELVIN A	
			ART UNIT 3754	PAPER NUMBER
SHORTENED STATUTORY PERIOD OF RESPONSE		MAIL DATE	DELIVERY MODE	
3 MONTHS		01/05/2007	PAPER	

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

## Office Action Summary

Application No.

10/830,033

Applicant(s)

DUCK ET AL.

Examiner

Melvin A. Cartagena

Art Unit

3754

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 12 July 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-25 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 April 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 6292004.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### *Drawings*

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the sensor to detect when the threaded rod has reached a full stroke must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

*Claim Rejections - 35 USC § 102*

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1, 8, 9 and 12-19 rejected under 35 U.S.C. 102(b) as being anticipated by US 5,284,423 to Holdsworth et al.

Holdsworth shows a computer controlled positive displacement pump as seen in Figs. 1 and 6, having a cylindrical chamber constructed of acrylic, a piston 1, a threaded drive 3 connected to the piston, a stepper motor 11 rotate the drive to displaced the piston toward an outlet by a distance corresponding to a volume, see column 4, lines 33-35.

Holdsworth also shows an anti-rotation device 9 coupled to the threaded drive by the piston to prevent rotation of the piston, a piston seal 7, flanges with recess portions receiving the cylinder, see Fig. 1, position sensors 41 and 43, a user LCD interface 25 including a button panel, a microprocessor 15 and a wired RS 232 communication port.

4. Claims 1, 8-11, 14-16 and 18-21 are rejected under 35 U.S.C. 102(e) as being anticipated by US 6,957,747 to Peeler et al.

Peeler shows single and multiple dispensing pumps as seen in Figs. 2 and 4, and Fig. 5 respectively, having a cylindrical chamber 16, a dispensing outlet 57, and a piston

Art Unit: 3754

42 with a seal. A threaded drive 13 connected to the piston by coupler 14, anti-rotation device 64 with a slidable guide tube; see Fig. 3, a stepper motor 12, a user interface 24, see column 9, lines 21-34, a microprocessor 22 and wired and wireless communication ports, see column 9, lines 46 and 47.

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 2-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 5,284,423 to Holdsworth et al. in view of US 1,984,296 to Witter.

Holdsworth shows all claimed features as discussed above except for inlet and outlet check valves in a front flange. Witter shows a dispenser as seen in Fig. 1 having a check valves 40 and 48 in a flange with rigid inlet conduit and outlet conduits, see Fig. 1. It would have been obvious to a person with ordinary skill in the art at the time the invention was made to modify the device of Holdsworth to include a flange with an intake and an outlet check valve to reduce the number of controllers needed to operate the device by allowing the fluid pressure generated by the piston to control the intake and outlet valves as taught by Witter.

7. Claims 22-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 6,957,747 to Peeler et al. in view of US 5,152,429 to Billings.

Peeler et al. shows all claimed features as discussed above except for the containers connected to a plurality of pumps in a cabinet and flexible tubes connected to

Art Unit: 3754

a nozzle cap. Billings shows a plurality supply container 61-64 connected to a plurality of pumps 1-4 in a cabinet, as seen in Figs. 1 and 2, and a nozzle dispenser 52 connected to the individual pumps by manifold 46 and flexible tubes 51. It would have been obvious to a person with ordinary skill in the art at the time the invention was made to use the device of Peeler in a cabinet with multiple supply containers and pumps connected to a dispensing nozzle by flexible connectors to protect the dispensing mechanism and permitting the user to hand held the dispensing nozzle to multiple location while maintaining the dispensing device in one fix location as taught by Billings.

8. Claims 6 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 5,284,423 to Holdsworth et al. as modify by US 1,984,296 to Witter as applied to claim 5 above, and further in view of US 6,968,983 to Laible.

The Holdsworth-Witter combination shows all claimed features as discussed above except for a cap with a check valve for the supply container. Laible shows a cap 76 with an air intake check valve as seen in Fig. 5. It would have been obvious to a person with ordinary skill in the art at the time the invention was made to modify the device of the Holdsworth-Witter combination to include a cap with a check valve to prevent liquid to back flow during transportation and installation of the container and permits ambient air to enter the interior of the container as the liquid is drawn therefrom as taught by Laible.

### *Conclusion*

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Howard shows a dispensing machine with multiple selections. Agee shows a mixing and dispensing unit. Starr shows a metered dispenser.

Art Unit: 3754

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Melvin A. Cartagena whose telephone number is (571) 272-4924. The examiner can normally be reached on T-F (7:30AM to 6:00 PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kevin P. Shaver can be reached on (571) 272-4720. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

MAC 12/17/06

MAC

  
KEVIN SHAVER  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 3700